AF $ ZHW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Sayag

Attorney Docket No.: SAY1P004D1

Application No.: 10/789,547

Examiner: LEE, SHUN K.

Filed: February 26, 2004

Group: 2884

Title: LIGHT STIMULATING AND COLLECTION METHODS FOR STORAGE-PHOSPHOR IMAGE PLATES

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as first-class mail on February 1, 2006 in an envelope addressed to the Commissioner for Patents, Mail Stop Appeal Brief-Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Signed: _____
Mia Mitchell-Haynes

APPEAL BRIEF TRANSMITTAL
(37 CFR 192)

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This brief is in furtherance of the Notice of Appeal filed in this case on October 19, 2005.

This application is on behalf of

☐ Small Entity ☒ Large Entity

Pursuant to 37 CFR 1.17(f), the fee for filing the Appeal Brief is:

☐ $250.00 (Small Entity) ☒ $500.00 (Large Entity)

☒ Applicant(s) hereby petition for a one extension(s) of time to under 37 CFR 1.136.

If an additional extension of time is required, please consider this a petition therefor.

☐ An extension for months has already been secured and the fee paid therefor of $ is deducted from the total fee due for the total months of extension now requested.

02/06/2006 MAHMED1 00000024 10789547
02 FC:1251 120.00 OP

☒ Applicant(s) believe that no (additional) Extension of Time is required; however, if it is determined that such an extension is required, Applicant(s) hereby petition that such an extension be granted and authorize the Commissioner to charge the required fees for an Extension of Time under 37 CFR 1.136 to Deposit Account No. 500388.

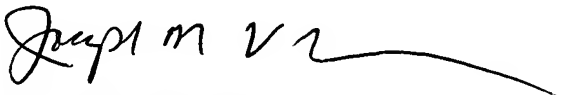
Total Fee Due:

Appeal Brief fee	$500.00
Extension Fee (if any)	$120.00
Total Fee Due	$620.00

☒ Enclosed is Check No. 11550 in the amount of $620.00.

☒ Charge any additional fees or credit any overpayment to Deposit Account No. 500388, (Order No. SAY1P004D1). Two copies of this transmittal are enclosed.

Respectfully submitted,
BEYER WEAVER & THOMAS, LLP



Joseph M. Villeneuve
Reg. No. 37,460

P.O. Box 70250
Oakland, CA 94612-0250
(510) 663-1100

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

EX PARTE SAYAG

Application for Patent

Filed February 26, 2004

Application No. 10/789,547

FOR:

LIGHT STIMULATING AND COLLECTION METHODS FOR STORAGE-PHOSPHOR IMAGE PLATES

APPEAL BRIEF

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as first-class mail on February 1, 2006 in an envelope addressed to the Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450.

Signed: _____

Mia Mitchell-Haynes

BEYER WEAVER & THOMAS, LLP
Attorneys for Appellant

TABLE OF CONTENTS

REAL PARTY IN INTEREST

The real party in interest is Michel Sayag of Mountain View, California, a United States citizen.

II. RELATED APPEALS AND INTERFERENCES

N/A

III. STATUS OF THE CLAIMS

Claims 1-22 were filed with the present application. Claims 1-22 remain pending in the application.

Claims 1, 9, 11, 12, and 20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over International Publication WO 99/28765 (Mueller) in view of U.S. Patent No. 5,221,843 (Alvarez) and the third edition of IEC 60406.

Claim 10 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller in view of Alvarez and IEC 60406 as applied to claim 1, and further in view of U.S. Patent No. 6,239,516 (Floresta) and U.S. Patent No. 5,912,944 (Budinski).

Claims 13-15 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller in view of Alvarez and IEC 60406 as applied to claim 1, and further in view of U.S. Patent No. 5,757,021 (Dewaele).

Claims 16-19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller in view of Alvarez and IEC 60406 as applied to claim 1, and further in view of U.S. Patent No. 5,864,146 (Karellas).

Claim 21 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller in view of Alvarez and IEC 60406 as applied to claim 20, and further in view of Floresta.

Claim 22 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller in view of Alvarez and IEC 60406 as applied to claim 1, and further in view of Appellant's admitted prior art (AAPA).

Claims 2-8 have been objected to by the Examiner, but indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The rejection of each of claims 1 and 9-22 is appealed.

IV. STATUS OF AMENDMENTS

Amendments filed with the response dated April 27, 2005 have been entered.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

Exemplary implementations of the x-ray image capture and readout system recited in the claims of the present application are described in throughout the present application such as, for example, at page 19, line 5, to page 20, line 22, with reference to Fig. 6; at page 24, lines 13-20, with reference to Fig. 9; and at page 43, line 22, to page 45, line 20, with reference to Figs. 19-24. Although the following discussion will refer to such implementations and corresponding figures and description in the application, it should be understood that the present invention is not limited to these embodiments.

Independent claim 1

The present invention provides methods and apparatus for retrieving information from a storage medium (e.g., a storage phosphor plate) in which "laterally diffused light is actually used to effect indirect stimulation of an adjacent region of the storage-phosphor." "By controlling the intensity of the stimulating light on one region of a storage-phosphor plate a well-defined diffusion distribution (and therefore stimulation) under an adjacent region can be achieved. Efficient collection of the stimulated light released from this indirectly stimulated region of the storage medium man then be effected on one or more detectors *in direct contact with (or at some very small distance from)* the surface of the plate" (emphasis added). See page 7, lines 4-15.

Claim 1 recites "an integrated x-ray image capture and readout system" having "a cassette enclosure having a form factor corresponding to a standard radiographic film cassette." The form factor recited in claim 1 corresponds "to a thickness of the cassette enclosure of about 0.6 inches." See, for example, the cassettes of Figs. 6, 9, and 19-24.

The system includes "a storage-phosphor plate operable to capture incident x-rays corresponding to an image," "a stimulating light source operable to expose a surface of the storage-phosphor plate to stimulating light," and "an array of detectors positioned to receive stimulated light via the surface of the storage-phosphor plate." The stimulated light is "released from the storage-phosphor plate in response to the stimulating light." The system also includes "an actuator assembly operable to effect relative motion between the surface of the storage-phosphor plate and each of the stimulating light source and the array of detectors in one dimension." See again the cassettes of Figs. 6, 9, and 19-24. See also, the embodiments of Figs. 1-4 and the corresponding description beginning at page 13, line 8.

"[T]he storage-phosphor plate, the stimulating light source, the array of detectors, and the actuator assembly are enclosed in the cassette enclosure." See again the cassettes of Figs. 6, 9, and 19-24.

As can readily be understood from the description of the present application, the form factor recited in claim 1 is enabled by the fact that the readout mechanism may be placed in such close proximity to the storage medium. See, for example, page 14, lines 20-25; page 17, lines 2-4; and page 19, line 13, to page 20, line 2.

Dependent claims 2-22

Claim 2 of the present application recites "an actuator driver positioned externally to the cassette enclosure and operationally coupled to the actuator assembly via a mechanical link." See, for example, the embodiments depicted in Figs. 19-21, 23, and 24, and the corresponding description in the specification.

Claim 3 recites that "the actuator driver is coupled directly to the cassette enclosure," while claim 4 recites that "the actuator driver is separate from the cassette enclosure." See, for example, Figs. 19 and 24, respectively.

Claim 5 recites that "the mechanical link connects the actuator driver and the actuator assembly via an aperture at a corner of the cassette enclosure." See, for example, Figs. 19, 20, 21, and 23.

Claim 6 recites that "the mechanical link forms a 135 degree angle with each of two edges of the cassette enclosure joined at the corner," while claim 7 recites that "the mechanical link is hinged at the corner of the cassette enclosure to allow at least lateral movement of the mechanical link." See, for example, Figs. 20 and 21, respectively.

Claim 8 recites that the system also includes "a transmission medium for transmitting the electronic data out of the cassette enclosure...via the aperture." See, for example, page 44, lines 21-22.

Claims 9-11 recite various limitations relating to the actuator assembly. Claim 12 recites "comprising a transmission medium for transmitting the electronic data out of the cassette enclosure."

Claim 13 recites "a radio frequency detector for detecting radio frequency energy in close proximity to the cassette enclosure, the radio frequency energy corresponding to patient information to be associated with the image." Claim 14 further recites "a radio frequency transmitter disposed outside of the cassette enclosure for generating the radio frequency energy," while claim 15 recites that "the radio frequency transmitter is included in one of a wrist band and a badge." See, for example, page 46, lines 4-13.

Claim 16 recites "an image capture detection circuitry for sensing whether capture of the incident x-rays is occurring and generating a signal indicative thereof." Claim 17 recites that "the image capture detection circuitry comprises an x-ray detector for detecting some of the incident x-rays." Claim 18 recites that "the image capture detection circuitry comprises a photodiode for detection prompt emission of the storage-phosphor plate in response to the incident x-rays." Claim 19 recites that "the signal is employed to control actuation of the actuator assembly." See, for example, page 45, line 21, to page 46, line 3.

Claim 20 recites that "the actuator assembly comprises a magnetic linear motor and the stimulating light source and the array of detectors are configured on a translation stage," while claim 21 recites that "the magnetic linear motor comprises at least one magnet disposed inside and along an edge of the cassette enclosure, and a linear motor actuator coupled to the translation stage." See, for example, Fig. 22 and page 45, lines 7-9.

Claim 22 recites that "the form factor of the cassette enclosure corresponds to a standard radiographic film cassette having a set of dimensions corresponding to one of 14" x 17", 14" x 14", 10" x 12", 8" x 10", 35 cm x 43 cm, 35 cm x 35 cm, 20 cm x 40 cm, 18 cm x 43 cm, 13 cm x 18 cm, 13 cm x 30 cm, 18 cm x 24 cm, and 24 cm x 30 cm." See for example, page 19, line 22, to page 20, line 2.

VI. ISSUE

The issue which Appellant believes to be most pertinent to the present appeal:

None of the cited references, either alone or in combination, teach or suggest an x-ray image capture and readout system having a cassette enclosure with a thickness of about 0.6 inches which encloses a storage-phosphor plate, a stimulating light source, an array of detectors, and an actuator assembly for effecting relative motion among the other system components.

VII. GROUPING OF CLAIMS

With respect to the issue described above, not all of the rejected claims stand or fall together. Each of claims 1-8, 18, and 19 will be argued individually. Claims 9-17 and 20-22 will stand or fall with claim 1.

VIII. ARGUMENT

Claims 1-22 were filed with the present application. Claims 1-22 remain pending in the application.

Claims 1, 9, 11, 12, and 20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over International Publication WO 99/28765 (Mueller) in view of U.S. Patent No. 5,221,843 (Alvarez) and the third edition of IEC 60406. Claims 10, 13-19, 21, and 22 also stand rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller in view of Alvarez and IEC 60406 as applied to claim 1, and further in view of a variety of art.

Several of the appealed claims are separately patentable and the patentability of each such claim will be argued separately. The Appellant's explanation of the differences between the above-cited references and the claimed invention will first be discussed for claim 1, and then for several dependent claims, each of which recites an additional limitation not found or suggested in the cited references.

Claim 1 is patentable over International Publication WO 99/28765 (Mueller) in view of U.S. Patent No. 5,221,843 (Alvarez) and the third edition of IEC 60406.

Mueller describes an x-ray "cassette" which contains a phosphor carrier and a device for reading out information stored in the phosphor carrier. The device includes a radiation source for exciting the phosphor carrier, and a receiving means for receiving the resulting radiation. See Abstract. Referring to the description in U.S. Patent No. 6,373,074 (i.e., the U.S. patent claiming priority from Mueller), the receiving means is described as a CCD 12 in combination with a Selfoc lens assembly 14 which focuses the excitation radiation on the individual elements of the CCD. See column 5, lines 10-27. Notably, Mueller states that "[i]t is possible to limit the thickness of the x-ray cassette to about 45 mm."

As an initial matter, it is important to note that the term "cassette" as used by Mueller should not be equated with a "standard radiographic film cassette" as recited in the claims of the present application. That is, as would be apparent to those of skill in the art, the "cassette" to which Mueller refers is more commonly referred to as a "bucky," which is a term used in the industry for the cassette tray (invented by Bucky) into which film cassettes are inserted. Like radiographic film cassettes, buckys also have standard sizes (although not subject to an international standard) and the typical clearance for a cassette tray is 1.94" (about 49 mm). Background information relating to the nature of buckys and illustrating this important distinction has previously been made of record. This information includes illustrations created by the Appellant to facilitate the Examiner's understanding of the difference between a "bucky" and a cassette as commonly understood in the art.

An Inventor Declaration Under 37 C.F.R. 1.132 has been made of record in which the inventor of the present application explains that this distinction would be apparent to one of ordinary skill in the art, stating in section 3 of the declaration that "Mueller clearly describes an enclosure which can be integrated directly in an x-ray unit, signifying an enclosure which can be inserted in the x-ray table, not in the cassette tray of the table's bucky. Because of its size, Mueller's enclosure can fit in the x-ray table as a replacement for the bucky but clearly cannot fit in the cassette tray."

Despite the language in Mueller and Alvarez regarding compatibility with conventional equipment, neither of the references teaches a device which can conform to the form factor recited in claim 1 and referred to in the present specification. Rather, Mueller indicates that its lower limit on "cassette" (i.e., bucky) thickness is at least three times the upper limit of the preferred standard cassettes defined by IEC 60406. This is due to the fact that the receiving means in Mueller, i.e., the CCD and its accompanying lens system, cannot be compressed below the stated limit due in large part to optical considerations. This is to be contrasted with the present invention which offers a variety of embodiments which are not so constrained.

Therefore, because Mueller's system cannot be enclosed in a cassette having a "form factor corresponding to a thickness of the cassette enclosure of about 0.6 inches" as recited in claim 1, the rejection of claim 1 over the combination of Mueller, Alvarez, and IEC 60406 should be withdrawn. Indeed, the fact that the apparatus taught by Mueller cannot fit within the maximum thickness prescribed by IEC 60406 makes it clear that the combination of Mueller's teachings with those of IEC 60406 is improper.

The Examiner disagreed with the Appellant's arguments in the previous response stating that the 45 mm limit to which Mueller refers "is merely an example of the very small dimensions of the x-ray cassette and is not an express teaching of a lower limit of ~45 mm." The Examiner went on to say that the "Applicant's argument that the cassette thickness cannot be manufactured with very small dimensions due to optical considerations such as the Selfoc lens is not persuasive since the Selfoc lens is optional."

With regard to the first point, the Appellant respectfully disagrees. In describing a key advantage, Mueller states that his technique makes it possible "to limit the thickness of the x-ray cassette to about 45 mm." It strains credibility to assert that this is "not an express teaching of a lower limit." In addition to use of the term "limit" with reference to the phrase "about 45 mm," the inventor is describing a key advantage of his invention. To assert that the inventor would not refer to the absolute minimum value he thought possible is simply not an accurate or credible reading of the reference.

With regard to the second point, the Examiner mischaracterizes Mueller's statement at column 5, lines 12-14. Mueller is not saying that some form of lens is not required, but that having an individual Selfoc lens "for each stimulable point of the line of the phosphor plate...is not required for the invention." That is, the large array of Selfoc lenses contemplated by lines 12-13 of column 5 is not necessary. However, as would be understood by one of ordinary skill in the art, Mueller does not suggest that optical elements (e.g., a single Selfoc lens or the equivalent) between the plate and the photodetector are unnecessary. To the contrary, it would be apparent to one of ordinary skill in the art that Mueller's system would not work without some form of relay optics to focus the radiation from the plate on the CCD.

That is, the manner in which Mueller's technique reads out the information stored in a phosphor plate and the size of the CCD require some distance between the phosphor plate and the CCD assembly which, in turn, requires an optical system to transmit light from the plate to the CCD, i.e., to focus the light on the CCD. This can be understood with reference to Fig. 1 of Mueller.

As shown in that figure, the size of CCD assembly 12 and the requirement that it be placed at an angle and off to the side of laser diodes 11 (so as to be able to receive the emitted radiation) requires a minimum physical spacing which, in turn, requires the use of an intervening optical relay. This, therefore, forces a minimum size on the assembly which Mueller himself states to be "about 45 mm."

By contrast, the readout mechanism employed by the present invention allows the image capture devices (e.g., photodetector array 114 of Fig. 1) to be placed in extremely close proximity to the surface of phosphor plate 104. This is due to the fact that the present invention reads light released from a storage medium in response to laterally diffused light energy. This allows for embodiments without bulky intervening optical elements which, in turn, enables a much thinner assembly geometry (i.e., about 0.6 inches) to be achieved.

Thus, because of the geometry imposed by Mueller's readout technique, a device constructed in the manner described cannot even approach a "form factor corresponding to a thickness of the cassette enclosure of about 0.6 inches."

In the rule 132 declaration referred to above, the inventor explains the technical bases for the proposition that the system described by Mueller is not capable of being confined within a cassette having the form factor recited in claim 1. For example, in section 4 of the declaration, the inventor states:

> Mueller calls the imaging system between the phosphor plate and the CCD line the reproduction device (column 5, line 10). It is important to remember that, unlike a flying-spot scanner which stimulates the plate one point at a time, Mueller's apparatus stimulates the plate one line at a time and therefore requires a reproduction device to image the stimulated line onto the CCD line array. Without such reproduction device, nothing would prevent light generated at one location along the stimulated area of the plate to reach many pixels on the CCD line array. Similarly, nothing would prevent light generated at different locations of the plate to reach the same pixel of the CCD line array. *Thus, without a reproduction device (e.g., a Selfoc lens or its equivalent) capable of forming an image of the plate onto the CCD line array, the CCD line array is unable to perform its task and Mueller's reading apparatus cannot function.*

The inventor goes on to state that:

> Mueller states that is not necessary to have a Selfoc lens for each point of the line, meaning the Selfoc array does not have to contain as many lenses as the number of photodetectors (column 5, lines 5-6). This does not, however, mean that no intervening optical system is needed. Rather, as discussed above, some mechanism is required to prevent light intended for one pixel from impinging on adjacent pixels. *Without such a mechanism, Mueller would be inoperative.* In fact, Mueller suggests that a microlens array can be used as an alternative to the Selfoc array (column 5, lines 26-27).

Thus, the inventor of the present invention has made it clear that one of ordinary skill in the art would understand that Mueller's system requires some form of intervening optical system to focus light on the CCD array and that, as a result, it could not be confined to a form factor as recited in the claims of the present application.

The Examiner appears to have disregarded his obligation to consider and specifically respond to evidence presented in a rule 132 declaration as outlined in MPEP 716.01. That is, the Examiner responded to the supporting information provided in the rule 132 declaration simply by disagreeing with the evidence presented rather than making the specific explanation required. The Appellant is entitled to be presented with the basis for such a refutation, particularly when the evidence presented completely undermines the Examiner's position.

For example, the Examiner has stated that "[t]here is no evidence within the Mueller et al. reference that a reciprocating grid and reciprocating means are incorporated within the x-ray cassette of Mueller et al.," and that therefore the "declaration...is insufficient to overcome the rejection." However, the Appellant has provided other clear evidence that one of ordinary skill in the art would understand that Mueller's "cassette" is, in reality, a digital bucky. The

Examiner has not addressed the vast majority of this evidence, and therefore his assertion regarding the sufficiency of the declaration is unwarranted.

In view of the foregoing, the teaching of Mueller cannot be combined with IEC 60406 to obviate any of the claims of the present invention. The Appellant therefore respectfully requests that the rejection of claim 1 over Mueller, Alvarez, and IEC 60406 be withdrawn. In addition, dependent claims 2-22 are also believed to be allowable over the cited art for at least the reasons discussed.

Dependent claims 2-22

By virtue of their direct or indirect dependency on claim 1, claims 2-22 of the present application are believed to be allowable over the cited combination of references for at least the reasons discussed. However, some of these claims are believed to be allowable for additional reasons discussed below.

The Appellant agrees with the Examiner's indication that claims 2-8 of the present application recite patentable subject matter. For example, the actuator recited in claim 2 is neither taught nor suggested by the cited references. Neither are the various additional limitations recited in each of claims 3-8. Each of these claims is therefore allowable over the art of record.

With regard to claim 19, the Examiner cites Karellas as obviating the use of image capture detection circuitry to control actuation of the actuator assembly. The Appellant respectfully disagrees.

Karellas refers only to "tracking the time of the x-ray exposure and modulating the duration of the light pulse" for the purpose of "suppressing charge saturation in the imaging sensor." See column 36, lines 60-63. Karellas makes no suggestion that the detection of x-ray energy may be used for the purpose recited in claim 19, i.e., "actuation of the actuator assembly" "to effect relative motion between the surface of the storage-phosphor plate and each of the stimulating light source and the array of detectors in one dimension." Because this use is not taught nor suggested, the rejection should be withdrawn.

In addition, the Examiner asserted that the use of a photodiode to implement such detection circuitry as recited in claim 18 was obvious over Karellas. The Appellant respectfully disagrees. Karellas only mentions the use of its CCD to detect light corresponding to x-ray exposure time. The use of an auxiliary device such as a photodiode is neither taught nor suggested. The rejection of claim 18 should therefore be withdrawn.

In view of the foregoing, it is respectfully submitted that the rejections of claims 1 and 9-22 of the present application under 35 U.S.C. 103(a) should be reversed.

Respectfully Submitted,
BEYER WEAVER & THOMAS, LLP

Joseph M. Villeneuve
Registration No. 37,460

IX. APPENDIX

CLAIMS ON APPEAL

1. (Previously presented) An integrated x-ray image capture and readout system, comprising:

a cassette enclosure having a form factor corresponding to a standard radiographic film cassette, the form factor corresponding to a thickness of the cassette enclosure of about 0.6 inches;

a storage-phosphor plate operable to capture incident x-rays corresponding to an image;

a stimulating light source operable to expose a surface of the storage-phosphor plate to stimulating light;

an array of detectors positioned to receive stimulated light via the surface of the storage-phosphor plate, the stimulated light being released from the storage-phosphor plate in response to the stimulating light; and

an actuator assembly operable to effect relative motion between the surface of the storage-phosphor plate and each of the stimulating light source and the array of detectors in one dimension;

wherein the storage-phosphor plate, the stimulating light source, the array of detectors, and the actuator assembly are enclosed in the cassette enclosure.

2. (Original) The system of claim 1 further comprising an actuator driver positioned externally to the cassette enclosure and operationally coupled to the actuator assembly via a mechanical link.

3. (Original) The system of claim 2 wherein the actuator driver is coupled directly to the cassette enclosure.

4. (Original) The system of claim 2 wherein the actuator driver is separate from the cassette enclosure.

5. (Original) The system of claim 2 wherein the mechanical link connects the actuator driver and the actuator assembly via an aperture at a corner of the cassette enclosure.

6. (Original) The system of claim 5 wherein the mechanical link forms a 135 degree angle with each of two edges of the cassette enclosure joined at the corner.

7. (Original) The system of claim 5 wherein the mechanical link is hinged at the corner of the cassette enclosure to allow at least lateral movement of the mechanical link.

8. (Original) The system of claim 2 wherein the array of detectors is operable to convert the stimulated light to electronic data corresponding to the image, the system further comprising a transmission medium for transmitting the electronic data out of the cassette enclosure, the transmission medium exiting the cassette enclosure via the aperture.

9. (Original) The system of claim 1 wherein the actuator assembly is disposed along an edge of the cassette enclosure to maximize an imaging area of the storage-phosphor plate.

10. (Original) The system of claim 1 wherein at least a portion of the actuator assembly comprises a radiolucent material.

11. (Original) The system of claim 1 wherein the actuator assembly comprises one of a lead screw, a belt, a magnetic linear motor, and an inchworm motor.

12. (Original) The system of claim 1 wherein the array of detectors is operable to convert the stimulated light to electronic data corresponding to the image, the system further comprising a transmission medium for transmitting the electronic data out of the cassette enclosure.

13. (Original) The system of claim 1 further comprising a radio frequency detector for detecting radio frequency energy in close proximity to the cassette enclosure, the radio frequency energy corresponding to patient information to be associated with the image.

14. (Original) The system of claim 13 further comprising a radio frequency transmitter disposed outside of the cassette enclosure for generating the radio frequency energy.

15. (Original) The system of claim 14 wherein the radio frequency transmitter is included in one of a wrist band and a badge.

16. (Original) The system of claim 1 further comprising an image capture detection circuitry for sensing whether capture of the incident x-rays is occurring and generating a signal indicative thereof.

17. (Original) The system of claim 16 wherein the image capture detection circuitry comprises an x-ray detector for detecting some of the incident x-rays.

18. (Original) The system of claim 16 wherein the image capture detection circuitry comprises a photodiode for detection prompt emission of the storage-phosphor plate in response to the incident x-rays.

19. (Original) The system of claim 16 wherein the signal is employed to control actuation of the actuator assembly.

20. (Original) The system of claim 1 wherein the actuator assembly comprises a magnetic linear motor and the stimulating light source and the array of detectors are configured on a translation stage.

21. (Original) The system of claim 20 wherein the magnetic linear motor comprises at least one magnet disposed inside and along an edge of the cassette enclosure, and a linear motor actuator coupled to the translation stage.

22. (Original) The system of claim 1 wherein the form factor of the cassette enclosure corresponds to a standard radiographic film cassette having a set of dimensions

corresponding to one of 14" x 17", 14" x 14", 10" x 12", 8" x 10", 35 cm x 43 cm, 35 cm x 35 cm, 20 cm x 40 cm, 18 cm x 43 cm, 13 cm x 18 cm, 13 cm x 30 cm, 18 cm x 24 cm, and 24 cm x 30 cm.